DOCUMENT RESUME

ED 371 522 EC 303 109

AUTHOR Kohler, Paula D.; Rusch, Frank R.
TITLE Promoting Employment for Youths in Transition: Outcomes, Activities, and Indicators.
PUB DATE 94
NOTE 38p.; In: Kohler, Paula D.; Rusch, Frank R. Employment of Youths with Disabilities: Outcomes, Activities, and Indicators; see EC 303 108.
PUB TYPE Reports - Research/Technical (143)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS Activities; Change Strategies; *Disabilities; *Education Work Relationship; *Employment Potential; Federal Aid; High Schools; Intervention; Measurement Techniques; Models; Outcomes of Education; *Program Development; Program Evaluation; Student Educational Objectives; Systems Approach; Transitional Programs
IDENTIFIERS *Indicators; *Office of Special Educ Rehabilitative Services

ABSTRACT

This paper presents an overview of a three-phase investigation that featured: (1) an analysis of Office of Special Education and Rehabilitative Services demonstration projects focused on employment; (2) consensus development with respect to specific employment-related outcomes and activities; and (3) the identification of employment-related outcome and activity indicators. An emerging systems-level conceptual framework for evaluating program activities and outcomes is presented, along with an analytical model that illustrates the perceived relationship between an outcome, activities associated with producing the outcome, and indicators. Phase I results included identification of the outcomes and activities most frequently cited by 42 model demonstration projects focused on employment. During Phase II, 22 specific outcomes and 64 associated activities were identified and socially validated by 106 model demonstration project directors. Finally, during Phase III, a comprehensive list of measures was identified for 17 of the outcomes and 51 activities. Results from each phase give substance to the analytical model which features specific outcomes and activities at multiple levels of impact, supported by both qualitative and quantitative indicators. Implications for program restructuring and systems change are discussed. (Contains 27 references.) (Author/DB)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
☑ This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

ED 371 522

Chapter One

Promoting Employment for Youths in Transition: Outcomes, Activities, and Indicators[1]

Paula D. Kohler

and

Frank R. Rusch

Transition Research Institute

University of Illinois at Urbana-Champaign

Running Head: PROMOTING EMPLOYMENT

EC 303109

BEST COPY AVAILABLE

Abstract

This paper presents an overview of a three-phased investigation that featured (a) an analysis of OSERS demonstrations focused on employment, (b) consensus development with respect to specific employment-related outcomes and activities, and (c) the identification of employment-related outcome and activity indicators. An emerging systems-level conceptual framework (cf. Rusch & Phelps, 1987) for evaluating program activities and outcomes is presented also. Further, we present an analytical model that illustrates the perceived relationship between an outcome, activities associated with producing the outcome, and indicators. Phase I results included identification of the outcomes and activities most frequently cited by 42 model demonstration projects focused on employment. During Phase II, 22 specific outcomes and 64 associated activities were identified and socially validated by 106 model demonstration project directors. Finally, during Phase III, a comprehensive list of measures was identified for 17 of the outcomes and 51 activities. Results from each phase provide substance to the analytical model featuring specific outcomes and activities at multiple levels of impact, supported by both qualitative and quantitative indicators. Implications for program restructuring and systems change are discussed.

Promoting Employment for Youths in Transition:

Outcomes, Activities, and Indicators

The necessary knowledge, technology, and resources are now available to see the course that today's youths with disabilities should take in preparing for the challenges facing them tomorrow. If the practices that are being validated by federally sponsored model programs throughout the United States could be introduced in every high school, secondary special education effectiveness would be drastically improved.

Clearly, high school experiences are a cornerstone to assuring a youth's success throughout life. Indeed, failure to provide an effective high school experience results in personal shortcomings, including failure to attain additional education and training to help mold a career of personal choice.

How well are our youths with disabilities making the transition from high school student to contributing member of society? How well do high schools prepare students for employment? Do students' friendships extend beyond the high school years into early adulthood? Do students with disabilities engage in community activities?

Ample evidence is available to suggest that our high schools fail to achieve desired and expected outcomes for all students, regardless of ability (Education Commission of the States, 1983; National Assessment of Educational Progress, 1990; National Center for Education Statistics, 1990; National Commission on Excellence in Education, 1983). For youths with disabilities, the unemployment rate exceeds 50% (Wagner, 1989). An even greater percentage drop out of high schools each year. Although many of these youths leave school for employment, most do not find it. Tragically, tens of thousands of youths with disabilities leave high schools without the skills or the support needed to survive independently in their communities. Specifically, youths with disabilities who leave school early have less than a 35%

chance of finding work (Mithaug, Horiuchi, & Fanning, 1985). Further, youths with disabilities live dependently; over 80% live with their parents after high school (Wagner et al., 1991).

High schools appear primarily to be a training ground only for our nation's most promising students--those who will graduate and pursue a college education. Students who do not aspire to a postsecondary education, on the other hand, appear to be virtually isolated from any unified system that addresses their needs.

There is, however, reason to be optimistic about the potential for improving secondary education in this country. Over the past decade, much research has been sponsored by the Office of Special Education Programs, U. S. Department of Education, to address the complexities of providing an effective secondary special education. Policy-makers, parents, and educators from a variety of fields have turned their attention to reform-related issues, including the transition from high school to adult life. In particular, much attention has focused on programs and practices for promoting employment for youths with disabilities.

The purpose of this paper is to summarize findings of federally sponsored research focused on school-to-work transition with respect to employment-related outcomes and activities. Specifically, we present an overview of a three-phased investigation that featured (a) an analysis of OSERS demonstrations focused on employment, (b) consensus development with respect to specific employment-related outcomes and activities, and (c) identification of employment-related outcome and activity indicators.

Prior to presenting the three phases, we discuss our emerging systems-level conceptual framework (cf. Rusch & Phelps, 1987) utilized throughout each phase of the investigation for evaluating program activities and outcomes. Further, we present an analytical model that illustrates the perceived relationship between an outcome, activities associated with producing the outcome, and indicators. Finally, we discuss this research in light of generalizations that may be made to all students who are not college bound and who form a large network of youths who aspire to graduate and get on with their lives. Most importantly, this paper

introduces new knowledge relevant to employment outcomes that has emerged over a relatively short time.

Analytical Framework

Two analytical models were developed and/or extended during the three-phased investigation: (a) a systems-level conceptual framework for evaluating program outcomes and activities, and (b) an organizational framework for perceiving relationships between outcomes, activities, and indicators. Critical to each phase of the investigation, these analytical models provided the framework for analyzing and the structure for presenting and interpreting the results. A brief description of the two models follows.

Systems-Level Conceptual Framework

Throughout each phase of the investigation, employment outcomes and activities were organized according to the systems-level conceptual framework originally conceived by Rusch and Phelps (1987) and used subsequently to analyze model demonstration final reports to identify project purposes, activities, outcomes, and barriers (e.g., Rusch, Hughes, & Kohler, 1991). Featuring four levels of possible impact, this framework suggests that programmatic outcomes extend beyond the individuals who participate in a particular program. Further, the model suggests that programs focused on promoting employment outcomes may have to achieve outcomes across multiple levels to produce meaningful, systemic change.

The four levels include (a) the student and family, most often the primary focus of a program or intervention; (b) the program responsible for administering the intervention or providing the services; (c) the organizations that collaborate with the program to provide services; and (d) the community, which includes all the generic services, opportunities, and barriers that make up the environmental context of a program. The conceptual framework is graphically represented in Figure 1.

Insert Figure 1 about here

Organizational Framework of Outcomes, Activities, and Indicators

Efforts to determine program effectiveness have been plagued by a lack of agreed-upon outcomes and well-defined activities associated with specific outcomes (Bruininks, Wolman, & Thurlow, 1990; DeStefano & Wagner, 1992; Halpern, 1990; Oakes, 1986; Rusch, Kohler, & Hughes, 1992). Another problem relates to a need for measures that indicate the level and degree of intervention (activities) and achievement (outcomes). Thus, the relationships between targeted outcomes and activities, and their indicators, are often ambiguous, lacking clear definition and a conceptual framework that illustrates the perceived relationship.

Our perception of the conceptual arrangement--or organization--between outcomes, activities, and indicators is illustrated in Figure 2. This model posits that outcomes are the product of action and that particular indicators provide evidence that the outcome has been achieved. Further, activities, in the form of specific statements, represent the action associated with producing the outcome(s); indicators associated with each activity suggest that the activity has taken place. The substance that provides "life" to this model represents the underlying goal of the three-phased investigation, that is, the identification of agreed-upon outcomes related to employment, activities associated with producing the outcomes, and indicators or evidence that the outcome has been achieved and the activities implemented.

Insert Figure 2 about here

Phase I: Analysis of OSERS Demonstrations Focused on Employment

Faculty and research assistants at the Transition Research Institute at Illinois routinely analyze the final reports of model demonstration projects by competition areas to identify project demographics and purposes, as well as activities, outcomes, and barriers cited. The purpose of Phase I of this investigation was to aggregate the findings from five OSERS competitions, four of which focused upon transition from school to work.

Specific areas of analysis included: (a) examining project variables across competitions using the systems-level analytic model; (b) determining the degree to which projects aligned themselves with the purposes stated in the OSERS' competition announcements; and (c) examining relationships among project purposes, activities, outcomes, and barriers, including identifying those variables most frequently cited by projects. [The complete manuscript of this study is included in Rusch et al. (1992), the second article in this monograph.]

Method

The four employment-focused OSERS competitions examined in the Phase I analysis included (a) Research in Education of the Handicapped: Handicapped Children's Model Demonstration Projects/Postsecondary Projects (84.023G); (b) Postsecondary Demonstration Projects (84.078C); Special Projects and Demonstrations for Providing Vocational Rehabilitation Services to Severely Disabled Individuals (84.128A); and (d) Secondary Education and Transitional Services for Handicapped Youth: Models for Planning and Implementation of Transitional Services (84.158C).

Data from the analyses of each of the four competition areas (N = 42 projects) were aggregated by category (purpose, activities, outcomes, barriers) and organized by conceptual level (student/family, program, organization, community). Subsequently, the variables most frequently cited were identified across competitions, by level and category.

Results and Discussion

This early investigation was important for several reasons. Foremost, we applied a systems-level conceptual framework to the results reported by federally sponsored transition model demonstration projects. Second, we learned that model program directors reported many more outcomes related to their demonstrations in 42 communities across the United States than originally articulated in OSERS' request for proposals. Finally, this study paved the way for a better understanding of the need to relate certain program activities to reported outcomes.

When we compiled the activities reported by the 42 projects we found 88 activities, which varied according to their intended impact (e.g., programmatic versus organizational). Using the conceptual framework to classify these activities into those levels where they had an impact made it easier to identify commonly reported variables within and across competitions. Thus, we were able to identify the purposes, activities, outcomes, and barriers cited most frequently by the 42 projects (see Table 1). In particular, after classifying activities and outcomes, we were able to suggest to the field which activities might be undertaken to increase the chances of obtaining selected outcomes. For example, we reported that the outcome most frequently cited at the individual level by model program directors was to "Employ Individuals" and that these same directors reported "Providing Work Skills Training" as their primary activity. Unfortunately, the relationship between these and other outcomes and activities could only be implied.

Insert Table 1 about here

Another important result obtained from this study related to the shear number of activities and outcomes that were reported. For the first time, our field had access to a rich, albeit "soft," database consisting of promising practices. We recognized the importance of

developing a similar list of outcomes and related activities that would have broader appeal to the diverse constituents of transition-related research. Consequently, we decided to launch the second phase of our efforts to identify specific outcomes and activities that are considered important to achieving employment. Further, we were interested in identifying the specific indicators that personnel might use to report these outcomes and activities.

Phase II: Developing Consensus on Employment Outcomes and Activities

The purpose of Phase II was to identify specific employment-related outcomes and associated activities across the four conceptual levels. Specifically, the study was designed to extend the application of the systems-levels framework for evaluating program outcomes and to develop consensus on outcomes believed important for student employment after graduation. [See Rusch, Enchelmaier, & Kohler (in press), the third article in this monograph, for a complete manuscript of this study.]

Method

An initial pool of outcomes and activities associated with employment was obtained from the list of most frequently cited variables generated in Phase I. This list was incorporated into a draft questionnaire and submitted to an expert panel of 12 model demonstration transition-to-employment project directors. Based on the panel's feedback, a final questionnaire was developed that included 22 employment-related outcomes and 65 associated activities, organized by conceptual level (i.e., student/family, program, organization, and community). The questionnaire included a 9-point Likert-type scale for rating each outcome and activity (1 = Not Important, 9 = Very Important).

Using a two-round Delphi technique, the questionnaire was sent to 167 transition-to-employment project directors who rated each outcome and activity for importance. Two months after the first mailing, a second Delphi instrument listing the mean ratings for outcomes and activities obtained during Round 1 was sent to the 167 project directors.

Results and Discussion

The consensus-building activities used in this study resulted in a list of 22 outcomes and 65 related activities. Importantly, we were able to cluster these outcomes and activities according to their intended focus of impact. Table 2 provides a complete list of the outcomes and associated activities organized according to the four conceptual levels (i.e., student/family level, program level, organization level, and community level). As shown, project directors of 167 federally funded, model transition programs in 42 states believed that the following were the five most important outcomes of employment-focused transition programs: (a) utilizing individualized education plans (program level); (b) demonstrating improved work opportunities (community level); (c) placing students into competitive, integrated employment (including supported employment) (individual level); (d) educating students alongside their nondisabled peers (individual level); and (e) documenting progress in employment-related skill areas (individual level).

These findings are important because they are the first to suggest an agreed-upon list of outcomes that may serve as a blueprint for secondary educators promoting curriculum reform. Further, these outcomes suggest that all major participants who work with students with and without disabilities may need to acquire different competencies to meet the transition-related mandates of the Individuals with Disabilities Education Act Amendments of 1990 (IDEA).

As we have continued to examine the overall relevance of these findings, we have come to recognize important linkages between particular outcomes across the various levels and their relevance to the current school restructuring discussion. For instance, not only do personnel need to be trained with new outcomes in mind, those responsible for program development must address multiple levels of outcomes in order to design more effective high school programs. To achieve employment of students (Outcome 1 at the Student and Family Level, Table 2), high schools need to plan individualized programs that: include job-skills training, assess student growth and change, and ensure provision of related services from year to year

(Outcomes 7, 8, 5, and 6, respectively, at the Program Level). Additionally, high schools must be cost-effective (Outcome 14 at the Organization Level) and impact services and opportunities within their communities (Outcomes 21 and 22 at the Community Level).

Insert Table 2 about here

This study was important also because it increased our understanding of outcomes. As we pursued this research program, we were continually reminded of our failure to consider the "bigger picture" and found that a certain degree of ambiguity skill exists related to outcomes and their activities. Consequently, we decided to pursue a more complete model of outcomes and activities and their indicators. Our expectation was that if we were able to engage the field in "defining" these outcomes and indicators, we would see a more complete transition systems-change model appear, a model emphazing the individual and family, the high school program and cooperating agencies, and the relationships that exist to promote diversity in our communities.

Phase III: Identification of Employment-Related Outcome and Activity Indicators

The purpose of Phase III was to identify potential measures for evaluating the multiple outcomes and activities thought important for promoting employment of youths with disabilities. Specifically, this study sought to extend the results of phases I and II by identifying indicators for 17 of the employment outcomes and 51 associated activities identified and socially validated during Phase II. These 17 outcomes received a mean rating of 7.00 or higher during the Delphi procedure.

Thus, the intent of Phase III was to provide the substance necessary to complete Figure 2, the organizational framework of outcomes, activities, and indicators. That is, the focus was

on extending the systems-level model that featured outcomes and activities across the four conceptual levels, identifying measures to show that an outcome at a particular level had been achieved, identifying activities associated with producing the outcomes, and finally, identifying measures to indicate that an activity had taken place. [For a complete description of this phase of the investigation, see Kohler and Rusch (1993) the fourth article in this monograph.]

Method

Results from Phase II were mailed to the 167 project directors who served as the participant pool for the Delphi procedure. Fifty-three of them noted that they were interested in identifying measures for the outcomes and activities. They subsequently identified the five outcomes they were most interested in focusing on. Based on this information, participants were assigned to identify measures for specific outcomes and the activities associated with them. To facilitate data collection, the Delphi instrument was modified to include space for listing ways to measure each outcome and each activity. The five outcomes with a mean rating of less that 7.00 were not included in the instrument.

Responses were received for each of the 17 outcomes and all related activities. As responses were received, content analysis was conducted on the suggested measures. Redundant measures were removed and a comprehensive list of indicators for each outcome and activity was generated. This draft list was subsequently mailed to the initial pool of 167 project directors for feedback.

Results and Discussion

Both qualitative and quantitative indicators were submitted by the 30 project directors who participated in Phase III. For instance, qualitative measures suggested to reflect that students had been placed in competitive integrated employment (Outcome 1) included job types, description of benefits, and job patterns. Quantitative measures for the same outcome included hours worked, hourly wages, number of students placed, and student demographics.

Table 3 presents one outcome from each conceptual level, activities associated with that outcome, and suggested measures for each (see Appendix for a complete listing).

Insert Table 3 about here

This study has important implications for advancing theory and for extending a better understanding of practices related to employment. Our intent was to extend both the systems-change and the analytical models we have been studying. The systems-change model we propose recognizes the importance of multiple "players" at several levels to promote the transition of youths into the workplace. Transition from school to work requires that students receive relevant experiences in work settings that invite participation by all youths, regardless of their diversity from the mainstream. The analytical model operationalizes our "theory" into practice by providing multiple audiences with a "blueprint" that describes their roles in building the foundation for substantive change in the lives of young people who want to meet their own and others' expectations for being involved in their communities.

Related to practices, this study enjoined the participation of transition experts in an activity that invited them to acknowledge their understanding of the theoretical and practical importance of our research program. Their participation resulted in one of the most complete lists of transition strategies available. We were interested in completing our self-imposed obligation to identify indicators related to selected outcomes and activities. We gained much more: In our zeal to identify indicators, a list of strategies associated with each activity resulted. For example, the first activity listed under Outcome 6 (Utilize transition planning) suggests that we "develop strong cooperative linkages with vocational rehabilitation services to develop the IEPs." On face value, "develop strong cooperative linkages" sounds like more academic rhetoric. However, when 10 indicators were identified by the participants in this study, we learned that "cooperative linkages" relates to "Number of Agreements Signed, Number of

Consultations Documented, Participation of Personnel," and so on (see Table 3). Thus, as a result of this third study, we now possess a number of strategies (indicators) that can be utilized to implement the activity and measure whether it has taken place.

General Discussion

This investigation featured three phases: (a) an analysis of OSERS demonstrations focused on employment, (b) consensus development with respect to specific employment-related outcomes and activities, and (c) identification of employment-related outcome and activity indicators. Most importantly, we identified actual program outcomes and activities and used them as a basis for developing a conceptual framework of outcomes, activities, and indicators for promoting employment of youths with disabilities. This conceptual framework received substance from a national group of stakeholders presenting multiple perspectives. Thus, the results offer a realistic model that has the potential to serve as a blueprint for systems change.

To date, many recommendations with respect to "promising" practices related to promoting employment have been based on *implications* of research rather than research *findings* (Kohler, 1993). Thus, recommendations to districts scurrying to implement the transition-related mandates of IDEA are characterized by a great deal of rhetoric. We too have been "guilty" of advising service developers to "implement transition planning," "cooperate with community agencies," " place students into competitive integrated employment," and "improve access to community services" without offering specific strategies for doing so. Of course, implementation strategies will vary to some degree, dependent upon the resources and the context of a community. But, as a result of this investigation, we can offer a model of outcomes and activities related to promoting employment that includes a comprehensive array of strategies, or indicators. Two significant implications are inherent in this model.

First, the model can be used by those seeking to establish education and community programs that focus on employment of youths with disabilities. Again, how program builders

specifically implement part or all of the model depends on the local context, but in designing new or restructuring old programs, a number of strategies are available for them to consider. In particular, the model will be useful in three phases of program development: planning, implementation, and evaluation. For planning purposes, the employment outcome model can serve as a blueprint for identifying target outcomes across multiple levels. During implementation, the activities and indicators components serve as the action plan for specific program tasks. Finally, data collection associated with selected indicators can be used to provide formative evaluation of program implementation and to provide summary information on whether or not targeted outcomes and activities have been achieved. Based upon evaluation findings, program improvement, expansion, and/or replication can be considered. Thus, such a model can empower service developers to act, evaluate, and react with respect to promoting employment for youths with disabilities.

Second, the employment outcome model can serve as a research tool for seeking substantive evidence in support of specific activities and outcomes related to employment. A number of studies have been conducted to identify the status of youths with disabilities after they have exited high school (e.g., de Bettencourt, Zigmond, & Thornton, 1989; Fardig, Algozzine, Schwartz, Hensel, & Westling, 1985; Haring, Lovett, & Smith, 1990; Hasazi, Gordon, & Roe, 1985; Mithaug, et al., 1985; Roessler, Brolin, & Johnson, 1990; Wagner, 1989). However, fewer studies have actually identified evidence that supports a direct linkage between particular practices and targeted outcomes (Kohler, 1993).

Recently, various researchers have proposed conceptual models that articulate patterns of influence among independent and dependent variables to guide investigations of relationships between student characteristics and experiences, program characteristics and contexts, and student and program outcomes (cf. Halpern, 1993; Harnisch, Wermuth, & Zheng, 1992; Wagner, 1991). Others have articulated the need for a conceptual model for developing

that they restructure the delivery of educational experiences and related services in line with these outcomes. Concurrently, we must gather specific data about what we are doing and how we are succeeding. By implementing the strategies identified in this investigation, and evaluating subsequent outcomes, we can hope to diminish the prospects of an uncertain future that face so many individuals.

References

Bruininks, R. H., Wolman, C., & Thurlow, M. L. (1990). Consideration in designing survey studies and follow-up systems for special education service programs. Remedial and Special Education, 11, 7-17.

de Bettencourt, L. U., Zigmond, N., & Thornton, H. (1989). Follow-up of postsecondary age rural learning disabled graduates and dropouts. Exceptional Children, 56, 40-49.

DeStefano, L., & Wagner, M. (1992). Outcome assessment in special education: Lessons learned. In F. Rusch, L. DeStefano, J. Chadsey-Rusch, L. A. Phelps, & E. Szymanski (Eds.), Transition from school to adult life: Models, linkages and policy (pp. 173-208). Sycamore, IL: Sycamore Publishing.

Education Commission of the States. (1983). Task Force on Education for Economic Growth. Action for excellence. Denver, CO: Author.

Fardig, D. B., Algozzine, R. F., Schwartz, S. E., Hensel, J. W., & Westling, D. L. (1985). Postsecondary vocational adjustment of rural, mildly handicapped students. Exceptional Children, 52, 115-121.

Halpern, A. S. (1990). A methodological review of follow-up and follow-along studies tracking school leavers from special education. Career Development for Exceptional Individuals, 13, 13-27.

Halpern, A. S. (1993). Quality of life as a conceptual framework for evaluating transition outcomes. Exceptional Children, 59, 486-498.

Haring, T. G., & Breen C. (1989). Units of analysis of social interaction outcomes in supported education. Journal of the Association for Persons with Severe Handicaps, 14, 255-262.

Haring, K. A., Lovett, D. L., & Smith, D. D. (1990). A follow-up study of recent special education graduates of learning disabilities programs, Journal of Learning Disabilities, 23, 108-113.

Harnisch, D. L., Wermuth, T. R., & Zheng, P. (1992, January). Identification and validation of transition quality indicators: Implications for educational reform. Paper presented at the Third International Conference of the Division on Mental Retardation of the Council for Exceptional Children, Honolulu.

Hasazi, S. B., Gordon, L. R., & Roe, C. A. (1985). Factors associated with the employment status of handicapped youth exiting high school from 1979 to 1983. Exceptional Children, 51, 455-469.

Individuals with Disabilities Education Act Amendments of 1990, 20 U.S.C. § 1400 ff.

Kohler, P. D. (in press). Best practices in transition: Substantiated or implied? Career Development for Exceptional Individuals.

Kohler, P. D., & Rusch, F. R. (1993). School to work transition: Identification of employment outcome and activity indicators. Champaign: University of Illinois, Transition Research Institute (submitted for publication).

Mithaug, D. E., Horiuchi, C. N., & Fanning, P. N. (1985). A report of the Colorado statewide follow-up survey of special education students. Exceptional Children, 51, 397-404.

National Assessment of Educational Progress. (1990, September). Accelerating academic achievement. Washington, DC: U. S. Department of Education, Office of Educational Research and Improvement.

National Center for Education Statistics. (1990, September). Dropout rates in the United States: 1989. Washington, DC: U. S. Department of Education.

National Commission on Excellence in Education. (1983). A nation at risk: The imperative for educational reform. Washington, DC: Government Printing Office.

Oakes, J. (1986). Educational indicators: A guide for policy makers. Santa Monica, CA: Center for Policy Research in Education, Rutgers University, The Rand Corporation, University of Wisconsin-Madison.

Roessler, R. T., Brolin, D. E., & Johnson, J. M. (1990). Factors affecting employment success and quality of life. A one-year follow-up of students in special education. Career Development for Exceptional Individuals, 13, 95-107.

Rusch, F. R., Enchelmaier, J., & Kohler, P. D. (in press). Employment outcomes and activities for youths in transition. Career Development for Exceptional Individuals.

Rusch, F. R., Hughes, C., & Kohler, P. D. (1991). Descriptive analysis of secondary special education and transition services model programs. Champaign: University of Illinois, Transition Research Institute.

Rusch, F. R., Kohler, P. D., & Hughes, C. (1992). An analysis of OSERS-sponsored secondary special education and transitional services research. Career Development for Exceptional Individuals, 15, 121-143.

Rusch, F. R., & Phelps, L. A. (1987). Secondary special education and transition from school to work: A national priority. Exceptional Children, 53, 487-492.

Wagner, M. (1989). Youth with disabilities during transition: An overview of descriptive findings from the National Longitudinal Transition Study. Menlo Park, CA: SRI International.

Wagner, M. (1991). The benefits of secondary vocational education for young people with disabilities. Menlow Park, CA: SRI International.

Wagner, M., Newman, L., D'Amico, R., Jay, E. D., Butler-Nalin, P., Marder, C., & Cox, R. (1991). Youth with disabilities: How are they doing? Menlow Park, CA: SRI International.

Footnotes

1. This research was sponsored in part by the Office of Special Education and Rehabilitative Services (OSERS), U. S. Department of Education, under a cooperative agreement (H158-T-00-1) with the University of Illinois. Opinions expressed herein do not necessarily reflect those of OSERS.

Table 1

Summary Table of Most Frequently Cited Purposes, Activities, Outcomes, and Barriers of 42 OSERS Funded Employment-Focused Projects

Conceptual Level	Purposes	Activities	Outcomes	Barriers
Student and/or Family	Improve Vocational Training (30)	Provide Work Skills Training (24)	Employ Individuals (24)	Parent and/or Family Resistance (8)
Program	Establish Community-Based Model Programs (9)	Implement Programs or Materials and Evaluate Effectiveness (42)	Establish Employment Training Programs or Services (17)	Personnel Issues (10)
Organization	Develop Cooperative Delivery Systems (19) Disseminate Information (14)	Enhance Interagency Collaboration or Cooperation (21) Disseminate Information (29)	Establish Cooperative Delivery Systems (18) Disseminate Information (31)	Lack of Collaboration or Cooperation (10)
Community	None Cited (40) Enhance Public Awareness or Policy (2)	None Cited (28) Conduct Public Relations Activities or Training (10)	None Cited (42)	Transportation (12)

Note. From "An Analysis of OSERS-Sponsored Secondary Special Education and Transitional Services Research" by F. R. Rusch, P. D. Kohler, and C. Hughes, 1992, Career Development for Exceptional Individuals, 15, p. 137. Copyright 1992 by the Division on Career Development and Transition of the Council for Exceptional Children. Reprinted by permission.

Table 2

Mean Rating Values for 22 Employment Outcomes and Associated Activities

Outcome Number	Activity Number	Description	Mean Round 1	Mean Round 2
Student and Family Level				
1		Model transition-to-employment projects must place students into competitive, integrated employment (including supported employment).	8.28	8.40
	1.1	Provide job placement services.	7.91	7.85
	1.2	Work with adult service agencies to ensure job placement.	7.66	7.72
	1.3	Provide job exploration and job-training opportunities as part of the school curriculum to prepare students for competitive employment.	8.25	8.50
	1.4	Provide job support services.	8.09	8.27
	1.5	Provide the technical assistance to adult service agencies to provide job placement and job support services.	6.88	6.55
2		Model transition-to-employment projects should demonstrate functional skill development of students.	8.04	8.09
	2.1	Use instruments and procedures that identify individual functional skills and consumer preferences and life goals.	7.51	7.66
	2.2	Develop individualized objectives for students that reflect functional skill development in the domains of vocational skills, independent living, and community integration.	8.09	8.32
3		Model transition-to-employment projects should ensure that students experience education or training with nondisabled peers.	8.29	8.39
	3.1	Conduct training activities for youths without disabilities as well as for those with disabilities.	6.47	6.28
	3.2	Utilize integrated competitive and supported employment placements.	8.59	8.68
	3.3	Utilize nonpaid volunteer placements in compliance with Department of Labor (DOL) standards.	6.51	6.31
	3.4	Utilize community-based education and training sites.	8.26	8.47

Outcome Number	Activity Number	Description	Mean Round 1	Mean Round 2
Program Level				
4		Model transition-to-employment projects should upgrade the skills of professionals and paraprofessionals to licensing standards at their local equivalent.	6.65	6.08
	4.1	Train vocational counselors.	6.76	6.41
	4.2	Train job coaches.	7.64	7.48
	4.3	Provide inservice training for secondary and postsecondary teachers including job developers, resource teachers, and vocational educators.	8.04	8.08
	4.4	Train instructors on community, functional skill-based curriculum and instructional methods.	7.74	7.84
5		Model transition-to-employment projects should publish reports of their students' documented progress.	7.12	7.39
	5.1	Develop a final report for students and their families.	6.87	6.83
	5.2	Utilize Individualized Education Plans (IEPs) as the basis for publishing reports.	5.71	5.52
	5.3	Conduct a longitudinal study of graduates and report these data.	7.50	7.61
6		Model transition-to-employment projects should be continued beyond the federal funding period.	8.25	8.41
	6.1	Identify alternative funding from other agencies to continue the project.	7.92	8.08
	6.2	Develop funding from within local special education program budget for transition-to-employment projects.	7.99	7.93
7		Model transition projects should utilize individualized transition planning for students with disabilities.	8.45	8.77
	7.1	Develop strong cooperative linkages with vocational rehabilitation services to develop IEPs.	7.85	7.98
	7.2	Develop strong cooperative linkages with vocational education services to develop IEPs.	7.55	7.74

Outcome Number	Activity Number	Description	Mean Round 1	Mean Round 2
8		Model transition-to-employment projects should provide job-skill training.	7.76	8.01
	8.1	Conduct job-skill analysis.	7.53	7.90
	8.2	Develop a curriculum to facilitate training.	7.12	7.36
	8.3	Determine labor-market needs.	7.45	7.41
	8.4	Identify job skills that employers require of their employees.	8.03	8.32
9		Model transition-to-employment projects should document student progress in employment-related skills (e.g., social skills).	8.10	8.34
	9.1	Undertake social skills assessment of students.	7.32	7.54
	9.2	Provide on-site community-based training in employment-related social skills.	7.85	8.02
	9.3	Assess student progress in job-related skills.	8.06	8.24
10		Model transition-to-employment projects should achieve replication at least at the level of full utilization of a project feature, component, or product (such as a training manual).	7.33	7.40
	10.1	Negotiate directly with an organization or agency to replicate the model project.	6.54	6.42
	10.2	Develop and disseminate replication manual(s).	7.05	7.01
	10.3	Disseminate information and products to other agencies.	7.61	7.73
11		Model transition-to-employment projects should establish employment support services.	7.77	7.65
	11.1	Train job coaches.	7.39	7.56
	11.2	Provide co-worker training.	7.09	7.41
	11.3	Utilize vocational rehabilitation counselors as appropriate.	7.29	7.75

BEST COPY AVAILABLE

Outcome Number	Activity Number	Description	Mean Round 1	Mean Round 2
	11.4	Educate employers about benefits of hiring people with disabilities.	7.75	8.08
	11.5	Train and utilize job developers	7.60	7.66
12		Model transition-to-employment projects should develop curricula.	6.43	6.38
	12.1	Conduct an analysis of job coach roles.	6.14	6.26
	12.2	Employ personnel with curricula-writing skills.	5.36	5.28
	12.3	Review existing curricula to determine if new curricula are needed.	6.76	6.76
	12.4	Conduct needs assessment to determine curricular needs.	6.60	6.51
Organization Level				
13		Model transition-to-employment projects should develop materials to facilitate replication (e.g., replication guides, training manuals, assessment instruments).	7.29	7.12
	13.1	Allocate a section of the project budget to publication and production costs.	7.26	7.20
	13.2	Identify production priorities initially and monitor throughout the life of the project.	6.90	6.76
14		Model transition-to-employment projects should demonstrate cost effectiveness.	7.45	7.72
	14.1	Record all real costs of project activities.	7.77	7.90
	14.2	Record effectiveness measures such as time allocated to training and quality-of-life measures.	7.57	7.80
15		Model transition projects should disseminate information about their projects by producing a product at least at the level of an article for the popular press.	7.13	7.29
	15.1	Employ a project director with a commitment to disseminate information at least at this level.	7.32	7.33

Outcome Number	Activity Number	Description	Mean Round 1	Mean Round 2
	15.2	Require all workers to keep accurate records of all service and other activities conducted by the project.	7.31	7.54
Community Level				
16		Transition-to-employment projects should develop and document a formal interface between education and community services (e.g., between schools and state vocational rehabilitation agencies).	7.72	7.95
	16.1	Conduct workshops to train personnel.	7.23	7.40
	16.2	Communicate needs of project consumers to community agency personnel.	7.90	8.06
	16.3	Document meetings between education professionals and professionals/paraprofessionals outside of education.	7.13	7.14
17		Model transition-to-employment projects should accept responsibility for forming a state, local, or regional taskforce to achieve coordinated leadership and direction of a model project.	6.41	5.95
	17.1	Negotiate directly with administrators from community agencies.	6.59	6.62
	17.2	Conduct public relations programs for targeted audiences, such as employers, careproviders, and agencies.	6.97	6.63
18		Model transition-to-employment projects should develop and document a cooperative service delivery model when more than one agency is providing consumer services.	7.30	7.54
	18.1	Articulate the roles of all associated agencies.	7.37	7.59
	18.2	Employ personnel whose role is to coordinate project activities.	7.00	7.13
	18.3	Document services provided by cooperating agencies.	7.01	7.05
19		Model transition-to-employment projects should establish and document employment referral services.	6.19	6.17
	19.1	Operate a database for employer and consumer matching.	5.81	5.49
	19.2	Conduct and publish regular analyses of job-market trends.	4.91	4.63

BEST COPY AVAILABLE

Outcome Number	Activity Number	Description	Mean Round 1	Mean Round 2
20		Model transition-to-employment projects should produce expanded rehabilitation services.	6.64	6.44
	20.1	Document student (client) experiences with rehabilitation (education) agencies.	6.65	6.62
	20.2	Develop cooperative activities with rehabilitation (education) agencies.	7.47	7.60
21		Model transition-to-employment projects should demonstrate improved access to community-based services for persons with disabilities.	7.90	8.13
	21.1	Document the number of students in the project served by community agencies.	7.72	7.82
	21.2	Conduct outreach activities such as seminars and workshops for community agency personnel.	7.52	7.56
	21.3	Conduct technical assistance services to center-based agency personnel to foster conversion to community-based services.	7.30	7.31
22		Model transition-to-employment proejcts should demonstrate improved work opportunities for youths with disabilities.	8.43	8.67
	22.1	Evaluate and document effectiveness of job placement and maintenance activities.	8.17	8.56
	22.2	Research job trends and business requirements.	6.67	6.45
	22.3	Work cooperatively with community agencies to conduct longitudinal studies.	7.39	7.41

Note. From "Employment Outcomes and Activities for Youths in Transition " by F. R. Rusch, J. F. Enchelmaier, and P. D. Kohler, in press, Career Development for Exceptional Individuals, Copyright by the Division on Career Development and Transition of the Council for Exceptional Children. Reprinted by permission.

Table 3

Indicators of Selected Outcomes and Activities Across Four Conceptual Levels

NUMBER	DESCRIPTION
INDIVIDUAL/FAMILY LEVEL	
Outcome 1	**Model transition-to-employment projects must place students into competitive, integrated employment (including supported employment).** **Indicators** • Hours worked • Hourly wages • Number of students placed • Student demographics • Job types • Length of employment (days, weeks, months) • List of benefits (i.e., medical, vacation, sick time, profit sharing) • Number of jobs held prior to graduation and summary of evaluations of each placement • Annual salary • Number of full-time and part-time positions • Job patterns (e.g., never changed, voluntary change, laid off, quit, etc.) • Student satisfaction measures • Termination, reason (elaborate) • Record of how job was initially obtained and by whom • Number of employees at each business • Number and ratio of employees without disabilities on site when student present • Record of job match to student-stated work interests • Record of job advancement following initial placement -- increased job responsibilities or increased wages (e.g., in hrs worked, raises, promotions, job task responsibilities; increased level of indispensability to employer) • Documentation of single-subject research study • Reduction in public assistance (e.g., SSI, workers comp, public aid, etc.)
Activity 1a	**Provide job placement services.** **Indicators** • Potential Employer Contact Log (# of entries) • Number of potential employers • Number of student interviews • Number of placements • Types of placements • Number of potential employees • Identification of natural supports in each placement • Documentation of a specific "marketing" plan for each student • Student/family job preferences • Number employers contacted and method • Number student interviews, alone or assisted • Number of successful and unsuccessful placements and whether placement was in the top-priority list of student or family • Trainee waiting lists for placement • Number of placements per student

NUMBER	DESCRIPTION
Activity 1b	**Work with adult service agencies to ensure job placement.** **Indicators** • Signature of adult service representatives on each IEP • Record or letter of interagency agreement • Referral documentation • Number of meetings and frequency • Record of joint projects (i.e., Job Fair) • Record of business involvement with adult service agencies • Identification of roles adult service agencies play in job placement • Log of case management activities by type and frequency • Record of transition plan updates with adult service agencies • Written statement of percent time commitment to student and family that will occur at age 21 • Number of meetings of adult agencies with school personnel and/or student/family • Written progress reports on placement efforts • List of transition team members
Activity 1c	**Provide job exploration and job training opportunities as part of the school curriculum to prepare students for competitive employment.** **Indicators** • Number of days training in community (unpaid) per week • Number of days paid work per week • Hours worked during school day • Record of training and employment sites • Record of peer job coaching • Record of gifted and talented student support • Record of all school personnel involved in curriculum • Number of hours • List of job exploration sites, general and specific purposes for each site, competencies gained per student during exploration, number of hours in job exploration, and type of site • Performance data per student • Data on level of supervision • List of products produced and quantity (e.g., student resumes, training plans, or work profiles) • Number of training sites per student • Documentation of individualized training programs for students that reflect systematic instruction and strategies • Baseline and probe data pertaining to training • Graphs of student performance • Documentation of types of instruction or training provided

NUMBER	DESCRIPTION
Activity 1d	**Provide job support services.** **Indicators** • Number of training hours provided by teacher • Number of hours teacher present at employment site • Record of off-site support provided by teacher • Number of observation hours provided by teacher • Record of support provided by others (i.e., job coaches, voc. rehab. counselors, job developers) • Number of hours by school personnel other than teachers • Record of support provided by parents • Record of support provided by employer or supervisor • Contacts with family • Hours and type of school-based job-related instruction • Record of data-based fading against targeted performance criteria • Number of employee evaluations done by employer per month • Record of support provided by co-workers • Record of unusual incidents and training interventions • Record of training strategies and procedures • Record of data collection documenting skill acquisition
Activity 1e	**Provide technical assistance to adult service agencies to provide job placement and job support services.** **Indicators** • In-service workshop hours directed toward teaching job-placement and support techniques • Hours of direct training provided to job coaches on the job • One-to-one contact (contact logs) • Evidence of curriculum used • Type of training and technical assistance activities provided • Record of funds spent to train adult service providers • Workshop or inservice evaluation data • Needs assessment data • Number of people trained • List of training materials developed

NUMBER	DESCRIPTION

PROGRAM LEVEL

Outcome 6 **Model transition projects should utilize individualized transition planning for students with disabilities.**

Indicators

- Number of plans developed
- Number of plans completed
- Written documentation of transition services as part of IEP
- Record of number of transition planning meetings
- Signatures of adult service providers and community agency personnel on IEP
- Compilation of types of transition outcomes for students on annual basis
- Results of parent or family survey of planning process
- Evidence from student files illustrating program modifications to meet student's individualized transition needs
- List of agency representatives participating in planning
- Number of transition objectives in IEP
- Documentation of assessment information utilized in plan development
- Documentation of parent involvement in planning
- Documentation of student involvement in planning
- Documentation that service or curricular activities were provided as stated in the student's plan
- Evidence of curriculum that facilitates student involvement in planning

Activity 6a **Develop strong cooperative linkages with vocational rehabilitation services to develop the IEPs.**

Indicators

- Number of agreements developed
- Number of consultations
- Documented participation of personnel
- Signature of vocational rehabilitation personnel on IEP
- Record of contacts between vocational rehabilitation and student
- Report of number of students receiving services from vocational rehabilitation
- Letters of agreement
- Documentation of joint use of information (e.g., school records, assessment information, medical data)
- Evidence of referral system or process
- Documentation of services provided to students

NUMBER	DESCRIPTION
Activity 6b	**Develop strong cooperative linkages with vocational education services to develop the IEPs.** **Indicators** • Record of agreement(s) developed • Number of joint activities, meetings, or consultations • Record of actual participation in IEP development • Signature of vocational education personnel on IEPs • Report of number of goals or objectives contained in IEP carried out by or in conjunction with vocational education • Record of vocational education contact with families • Vocational education services identified on IEP • Record of attendance at meetings • Record of interagency agreements • Record of student enrollment in vocational curricula • Record of vocational education services provided • Evidence of collaborative consultation between voc ed and special ed

NUMBER	DESCRIPTION

ORGANIZATION LEVEL

Outcome 15 **Transition-to-employment projects should develop and document a cooperative service delivery model when more than one agency is providing consumer services.**

Indicators
- Number of agencies providing services
- Organizational structure for service provision
- Interagency agreement(s)
- Record of referral among agencies

Activity 15a **Articulate the roles of all associated agencies.**

Indicators
- Evidence of a process for developing of collaborative agreements
- Documentation of collaborative agreements
- Documentation of contractual arrangements
- Evidence of a process reviewing roles on a regular basis
- Number of formal operating agreements
- Number of informal operating agreements
- Evidence of networking effectiveness
- Evidence of a designated "coordinating" agency to oversee local agencies
- Number or existence of state laws or regulations reducing barriers to agency collaboration or articulating collaborative roles
- Documentation of services provided by and efforts of each agency

Activity 15b **Employ personnel whose role is to coordinate project activities.**

Indicators
- Job description of project coordinator or manager
- Evidence of a "coordinating" agency to oversee local agencies
- Documentation of state and local funds earmarked to support coordinating agency in this task
- Evidence of agency and project funding of personnel

Activity 15c **Document services provided by cooperating agencies.**

Indicators
- Record of employment services provided by type and by student
- Record of community living facilities and/or services provided
- Record of transportation arrangements and services
- Assignment of coordinating personnel, agency, or local planning councils to collect specific data on services offered, clients, costs, etc.
- Analysis of data collected for future decision making
- Case history of clients
- Number and type of activities completed by caseworkers
- Evidence of a process for evaluating accountability of cooperating agencies

NUMBER	DESCRIPTION

COMMUNITY LEVEL

Outcome 17 **Model transition-to-employment projects should demonstrate improved work opportunities for youths with disabilities.**

Indicators

- Record of types of jobs that comprise placements
- Statistics pertaining to wages, benefits, and hours
- Percent of graduating class employed by level of employment (i.e., full-time, part-time)
- Percent employed at or above minimum wage
- Percent who move to improved work situations (e.g., promotions, job changes for increased salary, benefits, working hours, etc.)
- Percent who lose jobs and/or move to "poorer" jobs
- Number of employers associated with project or program
- Number of students employed first year of project compared to subsequent years

Activity 17a **Evaluate and document effectiveness of job placement and maintenance activities.**

Indicators

- Length of time on job
- Employee satisfaction data concerning job placement, pre-/post- project
- Employer satisfaction data concerning job placement, pre-/post- project
- Documented opportunities for advancement
- 1-, 3-, 5-year follow-ups on youths:
    1. Employed in jobs for which training was provided; in jobs for which training was not provided
    2. Employed but changed job (up and down) in job trained; not in jobs trained
    3. Unemployed; never employed; previously employed
- Data on youths employed and wages, benefits, length of employment, pre-/post-project
- Data on family satisfaction with job placement, pre-/post- project
- Data on employer willingness to hire, pre-/post- project

Activity 17b **Research job trends and business requirements.**

Indicators

- Record of project or employer advisory committee, members, meetings
- Labor-market surveys:
    - Stable employment opportunities
    - Potential increased employment opportunities
    - Decreasing employment opportunities
    - Dead-end employment
    - Career ladder employment
    - Job requirements

NUMBER	DESCRIPTION
Activity 17c	**Work cooperatively with community agencies to conduct longitudinal studies.** **Indicators** • Assess student outcomes: employment, community living, recreation, etc. • Assess quality of life via self rating or reliable informant • Follow-up data on individuals who change agencies • Evaluation data pertaining to working relationship between agencies and project • Record of agreements detailing longitudinal studies to be conducted and roles of participants • Documentation of funding source • Evidence of research design for study

Note. From "School to Work Transition: Identification of Employment-Related Outcome and Activity Indicators" by P. D. Kohler and F. R. Rusch, 1993, Transition Research Institute, University of Illinois (submitted for publication). Reprinted by permission.

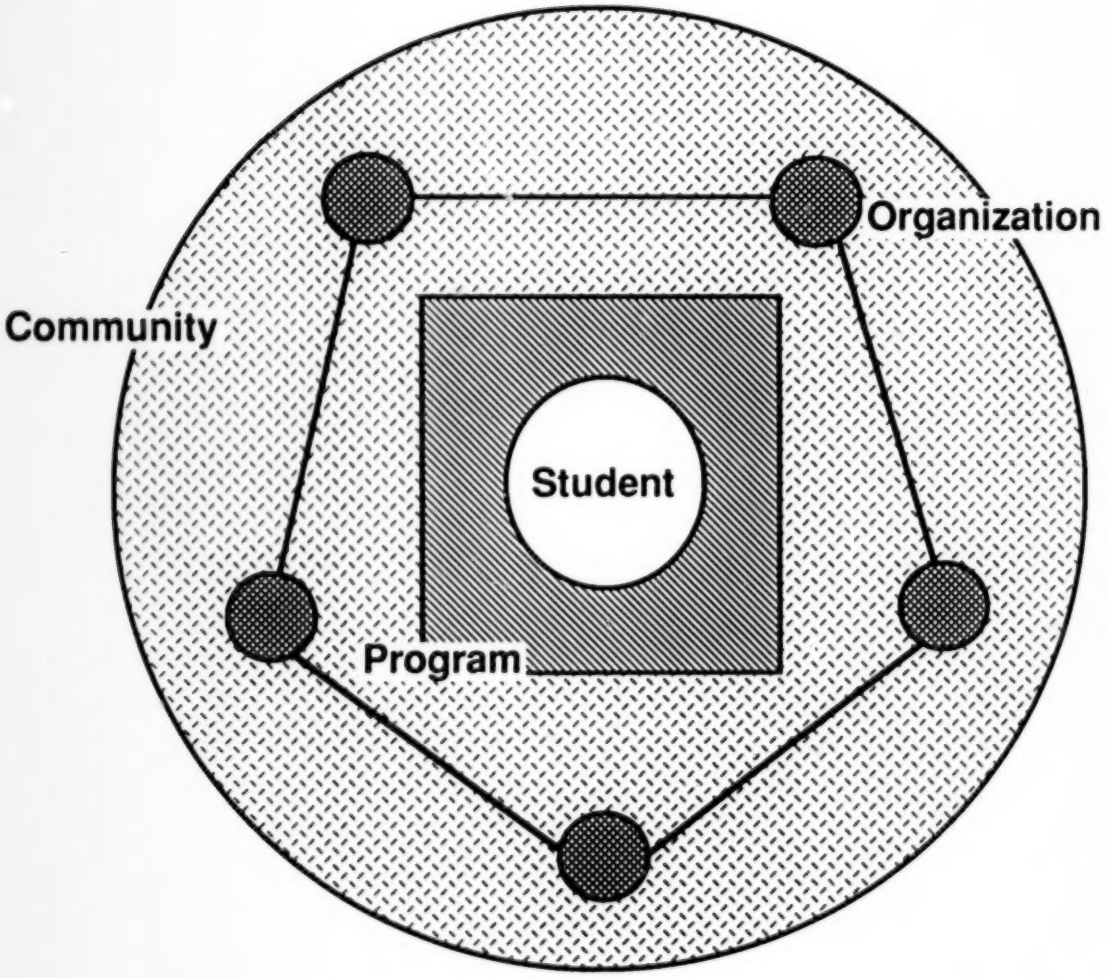

Figure 1. Systems-level conceptual framework for evaluating program activities and outcomes.

Note. From "School to Work Transition: Identification of Employment-Related Outcome and Activity Indicators" by P. D. Kohler and F. R. Rusch, 1993, Transition Research Institute, University of Illinois (submitted for publication). Reprinted by permission.

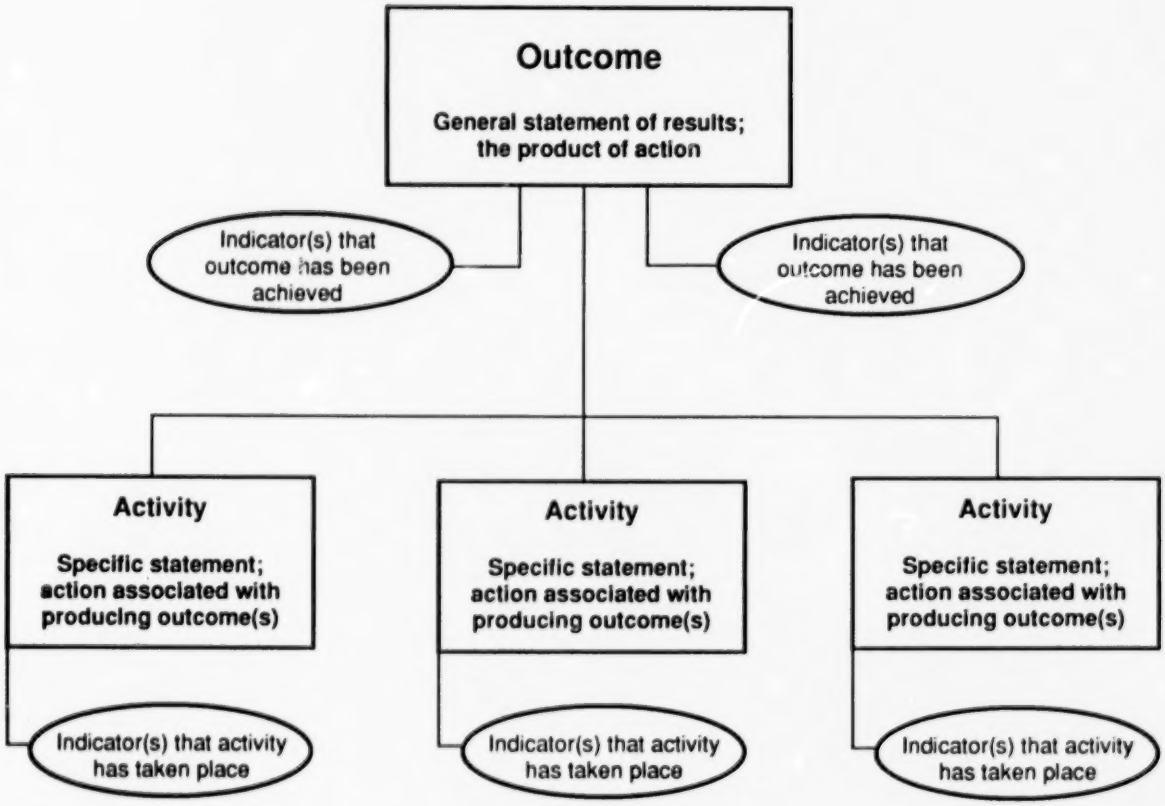
Outcome
General statement of results; the product of action
Indicator(s) that outcome has been achieved
Indicator(s) that outcome has been achieved
Activity
Specific statement; action associated with producing outcome(s)
Activity
Specific statement; action associated with producing outcome(s)
Activity
Specific statement; action associated with producing outcome(s)
Indicator(s) that activity has taken place
Indicator(s) that activity has taken place
Indicator(s) that activity has taken place

Figure 2. Analytical model illustrating perceived organizational relationship between an outcome, activities, and indicators.

Note. From "School to Work Transition: Identification of Employment-Related Outcome and Activity Indicators" by P. D. Kohler and F. R. Rusch, 1993, Transition Research Institute, University of Illinois (submitted for publication). Reprinted by permission.